



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

March 10, 2011

Mr. Thomas P. Joyce
President and Chief Nuclear Officer
PSEG Nuclear LLC – N09
P.O. Box 236
Hancocks Bridge, NJ 08038

SUBJECT: HOPE CREEK GENERATING STATION – NRC PROBLEM IDENTIFICATION
AND RESOLUTION INSPECTION REPORT 05000354/2011008

Dear Mr. Joyce:

On January 28, 2011, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at your Hope Creek Generating Station. The enclosed report documents the inspection results discussed with Mr. Lawrence Wagner, Plant Manager, and other members of your staff.

The inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems and compliance with the Commission's rules and regulations and the conditions of your license. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel.

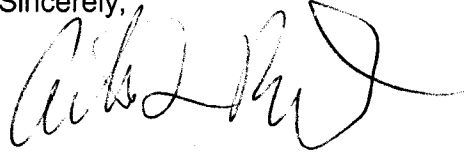
Based on the samples selected for review, the inspectors concluded that Public Service Enterprise Group Nuclear, LLC (PSEG) was generally effective in identifying, evaluating, and resolving problems at the Hope Creek Generating Station. PSEG personnel identified problems and entered them into the corrective action program at a low threshold. PSEG prioritized and evaluated issues commensurate with the safety significance of the problems and corrective actions were generally implemented in a timely manner.

This report documents one NRC identified finding of very low safety significance (Green). The inspectors determined that this finding did not involve a violation of NRC requirements. If you disagree with the cross-cutting aspect assigned to the finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Resident Inspector at the Hope Creek Generating Station.

In accordance with 10 CFR 2.390 of the NRCs "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the

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Sincerely,

A handwritten signature in black ink, appearing to read 'Arthur L. Burritt', with a stylized flourish at the end.

Arthur L. Burritt, Chief
Projects Branch 3
Division of Reactor Projects

Docket No.: 50-354
License No.: NPF-57

Enclosure: Inspection Report 05000354/2011008
w/ Attachment: Supplemental Information

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Sincerely,

/RA/

Arthur L. Burritt, Chief
Projects Branch 3
Division of Reactor Projects

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U.S. NUCLEAR REGULATORY COMMISSION**REGION I**

Docket No.: 50-354

License No.: NPF-57

Report Nos.: 05000354/2011008

Licensee: PSEG Nuclear LLC (PSEG)

Facility: Hope Creek Generating Station

Location: P.O. Box 236
Hancocks Bridge, NJ 08038

Dates: January 10, 2011 – January 28, 2011

Team Leader: Frank Arner, Senior Reactor Inspector, Division of Reactor Safety (DRS)

Inspectors: Amar Patel, Hope Creek Resident Inspector, Division of Reactor Projects (DRP)
Ami Rao, Project Engineer, DRP
Doug Dodson, Project Engineer, DRP

Approved By: Arthur L. Burritt, Chief
Project Branch 3
Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000354/2011008; 01/10/2011 – 01/28/2011; Hope Creek Generating Station; Biennial Baseline Inspection of Problem Identification and Resolution. The inspectors identified one finding in the area of effectiveness of corrective actions.

This NRC team inspection was performed by three regional inspectors and one resident inspector. The inspectors identified one finding of very low safety significance (Green) which was determined to not involve a violation of regulatory requirements. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using NRC Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. Cross-cutting aspects associated with findings are determined using IMC 0310, "Components Within the Cross-Cutting Areas." The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

Identification and Resolution of Problems

The inspectors concluded that Public Service Enterprise Group, Nuclear, LLC (PSEG) was generally effective in identifying, evaluating, and resolving problems. PSEG personnel identified problems, entered them into the corrective action program at a low threshold, and prioritized issues commensurate with their safety significance. In general, PSEG appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors also determined that PSEG typically implemented corrective actions to address the problems identified in the corrective action program in a timely manner. However, the inspectors identified one finding which was not a violation of regulatory requirements, in the area of implementation of corrective actions and several weaknesses of minor safety significance in the area of evaluation and prioritization of issues.

The inspectors concluded, based on their inspection sample, that PSEG adequately identified, reviewed, and applied relevant industry operating experience to Hope Creek Generating Station plant operations. In addition, based on those items selected for review, the inspectors determined that PSEG's audits and self-assessments were thorough.

Based on the interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual corrective action program and employee concerns program issues, the inspectors did not identify any indications that site personnel were unwilling to raise safety issues nor did they identify conditions that could have had a negative impact on the site's safety conscious work environment.

Cornerstone: Initiating Event

Green. The inspectors identified a finding of very low safety significance (Green) because PSEG did not correct turbine valve test and maintenance procedure deficiencies. Specifically, PSEG closed out notification 2043100 within their corrective action program without performing the actions to resolve the procedure deficiencies as required by PSEG corrective action procedures. PSEG entered this issue into their corrective action program as notifications 20494248 and 20495156 to evaluate the corrective actions needed to address the issue.

The finding was determined to be more than minor because the deficiency was associated with the procedure quality attribute of the Initiating Events cornerstone and adversely impacted the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the Initiating Event cornerstone. Specifically, because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available, the finding was determined to be of very low safety significance (Green).

This finding had a cross-cutting aspect in the area of problem identification and resolution because PSEG did not take appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance and complexity. Specifically, corrective actions outlined in notification 20413100 to resolve procedural deficiencies were not completed. [P.1.(d)] [Section 4OA2.1.c]

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (71152B)

This inspection constitutes one biennial sample of problem identification and resolution as defined by Inspection Procedure 71152. All documents reviewed during this inspection are listed in the Attachment to this report.

.1 Assessment of Corrective Action Program Effectiveness

a. Inspection Scope

The inspectors reviewed the procedures that described PSEG's corrective action program (CAP) at the Hope Creek Generating Station (Hope Creek). To assess the effectiveness of the CAP, the inspectors reviewed performance in three primary areas: problem identification, prioritization and evaluation of issues, and corrective action implementation. The inspectors compared performance in these areas to the requirements and standards contained in 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," and PSEG procedure LS-AA-125, "Corrective Action Program Procedure." For each of these areas, the inspectors considered risk insights from the station's risk analysis and reviewed notifications selected across the seven cornerstones of safety in the NRCs Reactor Oversight Process. Additionally, the inspectors attended multiple Station Ownership Committee and Management Review Committee meetings. The inspectors selected items from the following functional areas for review: engineering, operations, maintenance, emergency preparedness, radiation protection, chemistry, physical security, and oversight programs.

(1) Effectiveness of Problem Identification

In addition to the items described above, the inspectors reviewed system health reports, a sample of completed preventive and corrective maintenance work orders, completed surveillance test procedures, operator logs, and periodic trend reports. The inspectors also completed field walkdowns of various systems on site, such as the emergency diesel generators (EDGs), the service water (SW) system, high pressure coolant injection (HPCI), safety auxiliary cooling system (SACS), control room ventilation, and residual heat removal (RHR) systems. Additionally, the inspectors reviewed a sample of notifications written to document issues identified through internal self-assessments, audits, emergency preparedness drills, and the operating experience program. The inspectors completed this review to verify that PSEG entered conditions adverse to quality into their corrective action program as appropriate.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors reviewed the evaluation and prioritization of a sample of notifications issued since the last NRC biennial Problem Identification and Resolution inspection completed in January 2009. The inspectors also reviewed notifications that were assigned lower levels of significance that did not include formal cause evaluations to ensure they had been properly classified. The inspectors' review included the appropriateness of the assigned significance, the scope and depth of the causal

analysis, and the timeliness of resolution. The inspectors assessed whether the evaluations identified likely causes for the issues and developed appropriate corrective actions to address the identified causes. Further, the inspectors reviewed equipment operability determinations, reportability assessments, and extent-of-condition reviews for selected problems to verify these processes adequately addressed equipment operability, reporting of issues to the NRC, and the extent of problems.

(3) Effectiveness of Corrective Actions

The inspectors reviewed PSEG's completed corrective actions through documentation review and, in some cases, field walkdowns. The inspectors also reviewed notifications for adverse trends and repetitive problems to determine whether corrective actions were effective in addressing the broader issues. The inspectors reviewed PSEG's timeliness in implementing corrective actions and effectiveness in precluding recurrence for significant conditions adverse to quality. The inspectors also reviewed a sample of notifications associated with selected non-cited violations and findings to verify that PSEG personnel properly evaluated and resolved these issues. In addition, the inspectors expanded the corrective action review to five years to evaluate PSEG's actions for conditions adverse to quality relative to the residual heat removal system. This review was also performed in order to evaluate and identify any adverse system trends.

b. Assessment

(1) Effectiveness of Problem Identification

Based on the selected samples, plant walkdowns, and interviews of site personnel in multiple functional areas, the inspectors determined that PSEG identified problems and entered them into the corrective action program at a low threshold. The inspectors observed managers and supervisors at the Station Ownership Committee and Management Review Committee meetings appropriately questioning and challenging notifications to ensure clarification of the issues and success paths to resolution. Based on the samples reviewed including self-assessments performed, the inspectors determined that PSEG trended equipment and programmatic issues, and appropriately identified problems in notifications. The inspectors verified that conditions adverse to quality were routinely entered into the corrective action program as appropriate. In general, the inspectors did not identify any significant issues or concerns that had not been appropriately entered into the corrective action program for evaluation and resolution. However, the inspectors did identify minor weaknesses that PSEG promptly entered into their corrective action program for resolution. Examples of these issues included:

- During a plant walkdown, the inspectors noted an unsecured ladder in the 'C' RHR pump room. This condition was not in accordance with station procedures that require all support equipment, including ladders, to be returned to their proper location. Additionally, the HPCI to auxiliary steam spool piece was found in the HPCI room without any restraint, contrary to PSEG procedure requirements. These issues did not impact RHR or HPCI system operability and were determined to be of minor safety significance. PSEG entered these issues into their corrective action program and took immediate action to address the concerns.

- The inspectors identified a weakness in PSEG's investigation of an overload/power failure bezel alarm that occurred when the drywell chilled water containment cooling loop inboard isolation valve was stroked during testing in RF15. The inspectors determined that troubleshooting, at that time, cycled the valve such that the closure forces were different than what would have existed during the testing that was intended to simulate accident conditions. Specifically, PSEG's troubleshooting stroked the valve with the closed torque switch in operation, but the cause of the overload/power failure bezel alarm was that bypass switch LS-15, which bypasses the closed torque switch during accident conditions, was set too far into the valve seat. This resulted in a missed opportunity to identify the faulty setting of LS-15 and ultimately resulted in the failure of the motor for the drywell chilled water containment cooling loop inboard isolation valve during testing in RF16. The weakness in problem identification was determined to be of minor significance because while the motor failed, it was able to drive the valve into its closed safety position before the motor failed. PSEG initiated notification 20492038 to address this issue.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors determined that, in general, PSEG appropriately prioritized and evaluated issues commensurate with the safety significance of the identified problem. PSEG screened notifications for operability and reportability, categorized them by significance, and assigned actions to the appropriate department for evaluation and resolution. The inspectors determined that causal analyses appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors noted that PSEG's root cause analyses were generally thorough, and corrective and preventive actions addressed the identified causes. The notification screening process considered human performance issues, radiological safety concerns, repetitiveness and potential adverse trends. The inspectors also noted that the guidance provided by PSEG corrective action program implementing procedures appeared sufficient to ensure consistency in categorization of issues. However, the inspectors did note examples of evaluations which could have been more rigorous to fully identify all causes in order for them to be addressed. These issues were determined to be minor weaknesses associated with the evaluation of issues and are listed below:

- The inspectors identified weaknesses in PSEG's evaluation of a failure of motor operated valve (MOV) 1BEHV-F004A, core spray injection, to open on demand during in-service testing (IST). The inspectors determined that the associated equipment apparent cause evaluation (EQACE), 70100958, failed to identify that PSEG had not followed their procedures and process when they had revised an open torque switch bypass (LS-5) setting outside of its normal range in February 2008. PSEG's EQACE had noted that the 2009 failure to open was a repeat failure from 2005 and actions from the 2005 failure were to set LS-5 in accordance with the required position of between 15-50% of open travel. This ensures the open torque switch is bypassed during testing. The 2009 EQACE was focused on one of the causes of the failure, the open torque switch torque setting being too low, and had not identified actions to address the second contributing cause of the failure which was the bypass switch setting had been improperly revised in 2008.

The inspectors also questioned the extent of condition with respect to other valves potentially having their open torque switch bypass settings incorrectly revised outside of the normal settings. PSEG initiated notifications 20492830 and 20493038 to

address the inspectors concerns which included actions to revise the open torque switch bypass setting back to the proper position. The inspectors determined the weakness in the evaluation to be of minor safety significance because although the open torque switch bypass was incorrectly set and there were no actions identified to restore to the proper range, PSEG had increased the torque switch setting high enough to reasonably prevent a motor trip during future testing. Additionally, this condition only affected valve testing and during normal operation the valve is in the open position and the open torque switch would be bypassed under accident signals.

- The inspectors identified a weakness with PSEG's initial prioritization and evaluation regarding a September 2010 failure of the B RHR minimum flowrate valve, F007B, to stroke closed automatically after a pump start. The impact of this would be the inadvertent bypass of some injection flow away from the vessel in response to a postulated accident. The inspectors determined that PSEG initially did not follow their issue identification and screening process procedure, LS-AA-120, rev. 10, with respect to performing the required evaluation of the equipment failure in accordance with its component importance, risk consequences and level of uncertainty with the failure. Additionally, the initial classification of the failed equipment was incorrect as it was classified non-critical when it should have been critical. PSEG initiated notification 20481036 in response to the inspector concerns, identified other required actions in a subsequent review such as revisiting the preventive maintenance frequency for the relay and performed a lessons learned discussion at the station ownership committee. The inspectors determined the issue to be of minor safety significance because PSEG's investigation determined that the relay failure was an isolated manufacturing defect and similar equipment in the plant would be unaffected. Therefore, the lack of performing an initial equipment apparent cause evaluation had not adversely affected other mitigating equipment.
- The inspectors identified a weakness regarding the evaluation of the drywell chilled water valve motor failure previously discussed in the assessment of problem identification. The inspectors identified a weakness in PSEG's overall evaluation (notification 20485891) of the issue because there was no documented evaluation or investigation to determine why the emergency bypass closed limit switch (LS-15) had been incorrectly set, resulting in the failure of a safety related motor. LS-AA-120, Attachment 3, Guidance for Determining Evaluation Type, states that if the cause of an issue is not known and investigation is required to determine the cause of the failure, then some level of formal investigation would be necessary. The inspectors determined that without evaluating why the switch had been set incorrectly, it was also difficult to determine the potential for extent of condition concerns with other valves. PSEG initiated notification 20492038 to address the inspectors concerns. As discussed previously, the issue was determined to be of minor safety significance because the valve motor failed after repositioning the valve into its safety position during testing.

The inspectors independently evaluated all of the observations described above for significance in accordance with IMC 0612, Appendix B, "Issue Screening," and IMC 0612, Appendix E, "Examples of Minor Issues." The inspectors consider these issues to be of minor significance and, as a result, not subject to enforcement action in accordance with the NRC's Enforcement Policy.

(3) Effectiveness of Corrective Actions

The inspectors concluded that corrective actions for identified deficiencies were generally timely and adequately implemented. For significant conditions adverse to quality, PSEG identified actions to prevent recurrence. The inspectors concluded that corrective actions to address the sample of NRC non-cited violations and findings since the last problem identification and resolution inspection were timely and effective. The inspectors noted, based on the sample inspection, that PSEG completed effectiveness reviews for significant issues to verify that implemented corrective actions were effective. The inspectors identified one example where ineffective corrective actions contributed to a more than minor finding.

c. Findings

Ineffective Actions for Resolution of EHC Procedural Weaknesses

Introduction. The inspectors identified a finding of very low safety significance (Green) because PSEG did not correct turbine valve test and maintenance procedure deficiencies. Specifically, PSEG closed out notification 2043100 within their corrective action program without performing the actions to resolve the procedure deficiencies as required by PSEG corrective action procedures.

Description. The electro-hydraulic control (EHC) oil system supplies high pressure fluid that controls main turbine valve operation. The control oil is used for valve position control, turbine trip and turbine overspeed trip functions. The digital EHC system at Hope Creek provides the control signals for the hydraulic system to appropriately position the main turbine control valves.

On May 2, 2009, PSEG personnel initiated notification 20413100 to address a procedural issue related to returning main turbine control valves to service following on-line maintenance which would require restoration of EHC oil to the individual valve actuator. PSEG had identified that industry operating experience existed indicating that using the valve test logic for stroking valves for post EHC oil system maintenance restoration could result in reactor pressure transients and turbine trip/reactor scram events. The notification review resolved the issue with a number of proposed procedure revisions that would cycle the affected control valve fast acting solenoid, which would simulate valve opening/closing, in order to remove entrapped air from the EHC oil system and prevent unexpected control valve operation.

LS-AA-125, "Corrective Action Program Procedure," Attachment 6, "Examples of When to Use Corrective Actions," Rev. 13, describes that corrective actions are provided for technical errors in procedures that would impact structures, systems, or components. LS-AA-120, defines a notification as a document which identifies a deficiency that requires tracking and resolution. The inspectors determined that PSEG had appropriately entered an issue of concern into their corrective action tracking system. However, the corrective actions identified were never completed and the notification was closed out without the appropriate revisions being completed to the EHC test and maintenance procedures. During their review of this issue, PSEG identified an additional procedure that required revision. Procedure HC.OP-GP.CH-0001(Z), "Isolating Turbine Valves for Maintenance," Rev. 1, was an approved procedure for isolating turbine valves while at power conditions and did not contain the appropriate

instructions or concerns relative to venting during restoration of turbine valves from maintenance. PSEG entered this issue into their corrective action program as notifications 20494248 and 20495156 to evaluate the corrective actions needed to address the issue.

Analysis. PSEG did not take actions to resolve deficiencies in their procedures for post maintenance online EHC fluid venting operations. Specifically, PSEG closed out notification 20413100 within their corrective action program without performing the actions to resolve the procedure deficiencies. This was contrary to the notification process definition of resolving issues as defined in procedure LS-AA-120, and was considered a performance deficiency by the inspectors. The finding was determined to be more than minor because the deficiency was associated with the procedure quality attribute of the initiating event cornerstone and adversely impacted the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the initiating event cornerstone. Specifically, because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available, the finding was determined to be of very low safety significance (Green).

This finding had a cross-cutting aspect in the area of problem identification and resolution because PSEG did not take appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance and complexity. Specifically, corrective actions outlined in notification 20413100 to resolve procedural deficiencies were not completed. [P.1.(d)]

Enforcement. No violation of regulatory requirements was identified. The EHC system is not a safety related system and, as such, the requirements of 10 CFR 50, Appendix B, Criterion XVI do not apply to ineffective corrective actions for EHC procedure deficiencies. However, not correcting identified EHC procedure deficiencies was considered a finding and PSEG entered it into their corrective action program as notifications 20494248 and 20495156. **(FIN 05000354/2011008-01, Inadequate Corrective Action for EHC Turbine Valve Procedures)**

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The inspectors reviewed a sample of operating experience issues to confirm that PSEG appropriately evaluated the operating experience information for applicability to Hope Creek and had taken appropriate actions, when warranted. The inspectors reviewed notifications which evaluated operating experience documents associated with a sample of industry operating experience.

b. Assessment

The inspectors determined that PSEG appropriately considered internal and industry operating experience, and, where applicable, used the information to initiate corrective and preventive actions designed to identify and prevent similar issues at Hope Creek.

c. Findings

No findings were identified.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors reviewed a sample of audits, including the most recent audit of the corrective action program, departmental self-assessments, and assessments performed by independent organizations. Inspectors performed these reviews to determine if PSEG entered problems identified through these assessments into the corrective action program, when appropriate, and whether PSEG initiated corrective actions to address identified deficiencies. The inspectors evaluated the effectiveness of the audits and assessments by comparing audit and assessment results against self-revealing and NRC-identified observations made during the inspection.

b. Assessment

The inspectors concluded that self-assessments, audits, and other internal PSEG assessments were critical, thorough, and effective in identifying issues. The inspectors determined that PSEG completed these audits and self-assessments to a sufficient depth to identify issues which were entered into the corrective action program for evaluation. The inspectors determined that PSEG implemented corrective actions associated with the identified issues commensurate with their safety significance.

c. Findings

No findings were identified.

.4 Assessment of Safety Conscious Work Environment

a. Inspection Scope

During interviews with station personnel, the inspectors assessed the safety conscious work environment at the Hope Creek Generating Station. Specifically, the inspectors interviewed personnel to determine whether they were hesitant to raise safety concerns to their management and/or the NRC. The inspectors also interviewed representatives of the station Employee Concerns Program to determine what actions are implemented to ensure employees were aware of the program and its availability with regards to raising safety concerns. The inspectors reviewed the Employee Concerns Program files to ensure that PSEG entered issues into the corrective action program when appropriate.

b. Assessment

During interviews, PSEG staff expressed a willingness to use the corrective action program to identify plant issues and deficiencies and stated that they were willing to raise safety issues. The inspectors noted that no one interviewed stated that they personally experienced or were aware of a situation in which an individual had been retaliated against for raising a safety issue. All persons interviewed demonstrated an

adequate knowledge of the corrective action program and the Employee Concerns Program. Based on these limited interviews conducted during this inspection, the inspectors concluded that there was no evidence of an unacceptable safety conscious work environment and no significant challenges to the free flow of information.

c. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On January 28, 2011, the inspectors presented the inspection results to Mr. Lawrence Wagner, Plant Manager, and other members of the Hope Creek staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

L. Wagner, Plant Manager
L. Davis, Plant Systems Engineering
M. Gaffney, Manager, Regulatory Assurance
Y. Ghotok, Plant Systems Engineering
M. Gregg, Employee Concerns Program
C. Johnson, MOV Engineer
W. Kopchick, Manager, Plant Engineering
P. Kordziel, Plant Systems Engineering
E. Maguire, Plant Systems Engineering
J. Molner, Manager, Emergency Planning
F. Possessky, Coordinator, Station Corrective Action
K. Torres, Equipment Reliability Engineer
L. Whitney, Regulatory Assurance
K. Yearwood, BOP Systems Engineering

State of New Jersey Bureau of Nuclear Engineering

J. Humphries

LIST OF ITEMS OPEN, CLOSED, AND DISCUSSED

Opened and Closed

05000354/2011008-01	FIN	Inadequate Corrective Actions for EHC Turbine Valve Procedures
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LIST OF DOCUMENTS REVIEWED

Procedures

CC-AA-112, Temporary Configuration Changes, Rev. 12
CC-AA-103-1008, Owner's Acceptance Review of External Technical Products, Rev. 0
EE-AA-302-1008, MOV Diagnostic Test Preparation Instructions, Rev. 6
ER-AA-400-1001, Check Valve Monitoring and Predictive Maintenance Program, Rev. 8
ER-AA-2030, Conduct of Plant Engineering Manual, Rev. 8
EE:A-O-ZZ-MEE-0609, MOV Program Position Papers, Rev. 5
HC.CH-SO.AK-0001(Q), Condensate Demineralizer System Service Vessel, Rev. 27
HC.MD-GP.ZZ-0067(Q), Jamesbury Butterfly Valve Overhaul and Inspection, Rev. 5
HC.OP-FT.AC-0005(Q), Turbine Overspeed Protection System Operability Test, Rev. 12
HC.OP-GP.CH-0001(Z), Isolating Turbine Valves for Maintenance, Rev. 1
HC.OP-IS.BH-0003(Q), Standby Liquid Control Pump-AP208, Rev. 11
HC.OP-ST.AC-0002(Q), Turbine Valve Testing, Rev. 46
LS-AA-1, Nuclear Policy, Rev. 1
LS-AA-115, Operating Experience Program, Rev. 11
LS-AA-120, Issue Identification and Screening Process, Rev. 10
LS-AA-125, Corrective Action Program Procedure, Rev. 13
LS-AA-125-1001, Root Cause Evaluation Manual, Rev. 8

LS-AA-125-1003, Apparent Cause Evaluation Manual, Rev. 10
 LS-AA-125-1004, Effectiveness Review Manual, Rev. 3
 LS-AA-126, Self Assessment Program, Rev. 9
 LS-AA-126-1001, Focused Area Self-Assessments, Rev. 5
 MA-AA-716-026, Station Housekeeping/Material Condition Program, Rev. 8
 MA-AA-716-210, Performance Centered Maintenance (PCM) Process, Rev. 7
 OP-AA-102-102, General Area Checks and Operator Field Rounds, Rev. 7
 OP-AA-108-101, Control of Equipment and System Status, Rev. 5

Notifications (NOTFs) (* indicates that NOTF was generated as a result of this inspection)

20133002	20423999	20489054
20165712	20427201	20494194
20166330	20428743	*20492823
20197496	20431030	*20492830
20199122	20431727	*20492966
20200022	20433502	*20492989
20204110	20433608	*20492990
20277477	20440156	*20492993
20290600	20441710	*20493004
20298063	20446965	*20493030
20301478	20447552	*20493031
20308898	20449481	*20493032
20319979	20449923	*20493033
20338716	20452699	*20493038
20383338	20456749	*20493053
20386317	20457840	*20493739
20390625	20461105	*20493915
20391558	20461192	*20494175
20392702	20468129	*20494195
20393177	20468659	*20494179
20398299	20468746	*20494244
20407540	20476010	*20494245
20411670	20479272	*20494246
20411670	20480297	*20494247
20412330	20482597	*20494248
20416450	20482600	*20494525
20417483	20482865	*20495156
20418015	20488005	
20419988	20488120	
20421405	20489052	
20421980	20489053	

Work Orders

30029866
 30073249
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Self-Assessments and Audits

H10-01, EP Focused Area Drill Critique Report, 01/29/2010
 20429304, Self Assessment, CAP audit NOSA-HPC-009-03
 70085604, Single Loop Recirculation Operation
 70105646, NRC Generic Letter 89-13 Program Self Assessment, 2010
 70108407, Self Assessment, Reclassified HCGS TS Programs
 70109343, Self Assessment, Rigor in Risk Assessment Process
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NRC Non-Cited Violations and Findings

FIN 05000354/2009003-03, Automatic Reactor Scram Due to Leak on Scram Air Header
 NCV 05000354/2010004-03, Failure to Identify Inadequate RHR Pipe Vent Configuration
 NCV 05000354/2009003-02, Unplanned HPCI Unavailability due to Troubleshooting
 NCV 05000354/2009006-01, Inadequate Corrective Actions for Susceptibility of Air Accumulation in the Control Area Chilled Water System
 NCV 05000354/2009006-02, Non-Conservative EDG Test Acceptance Criteria

Miscellaneous Documents

Letter from Exelon Power Labs to PSEG-Nuclear, F/A of an Agastat Time Delay Relay, December 2010
 RHR System Health Report (Q4-2010)
 STACS System Health Report (Q4-2010)
 STACS System Health Report (Q1-2009)

LIST OF ACRONYMS

ADAMS	Agency-Wide Documents Access and Management System
ASME	American Society of Mechanical Engineers
CA	Corrective Action
CFR	Code of Federal Regulations
DRP	Division of Reactor Projects
EDG	Emergency Diesel Generator
EHC	Electro-Hydraulic Control
EP	Emergency Planning
HPCI	High Pressure Coolant Injection
IMC	Inspection Manual Chapter
MOV	Motor Operated Valve
MRC	Management Review Committee
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
PIMS	Plant Information Management System
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
SDP	Significance Determination Process
SACS	Safety Auxiliary Cooling System
SOC	Station Oversight Committee
TACS	Turbine Auxiliary Cooling System
UFSAR	Updated Final Safety Analysis Report